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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/225,486	01/06/1999	MITSUHIRO UCHIDA	Q52871	2417

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SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 200373202

EXAMINER

HANNETT, JAMES M

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/12/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

13

Office Action Summary

Application No.

09/225,486

Applicant(s)

UCHIDA ET AL.

Examiner

James M Hannett

Art Unit

2612



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 10, 13, 15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-5, 10, 13, 15, and 17-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 5/9/2003 have been fully considered but they are not persuasive.

As for the argument that Saito does not teach extracting a characteristic value from digital image signals, and that it appears to deal with only processing analog image signals. It is viewed by the examiner that the conversion of the incident light onto the image pickup circuit into electrical signals is viewed by the examiner as converting the analog light signal into discrete samples of data to be processed by the camera. Furthermore because the samples captured by the image pickup device are discrete samples it is viewed by the examiner as digital image data.

As for the argument that Abe does not teach that the characteristic value is extracted from a thumbnail image signal of the digital image signal. Abe teaches on Column 3, Lines 59-65 and Column 4, Lines 18-28 that the characteristic value is extracted from the image data that is divided up into blocks of 8X8 pixels. Abe teaches that the values are calculated using the average of all the pixels in a given block. Therefore, this constitutes a line reduction method in that the resolution of the image is decreased by averaging pixels. This process is viewed by the examiner as being equivalent to obtaining the data from a thumbnail image because the thumbnail image is viewed as the image that has a reduced resolution due to the averaging of adjacent pixels in the 8x8 blocks of data.

As for the argument that Terashita does not teach the limitation that when each of the digital image signals is composed of RGB color signal, the characteristic value is a

Art Unit: 2612

total average of averages of the digital image signals. The total average of averages is viewed by the examiner as the tricolor average density of the film. The density calculation is viewed by the examiner as an averaging process therefore, the tricolor average density is an average of averages. This is supported by Column 19, Lines 40-57 which shows that the density equation is the sum of density values for all pixels divided by the total number of pixels in the regions summed. This constitutes an average.

As for the argument pertaining to Terashita that the determination of a density value, based on a divided image and integrated pixel values bears no relationship to an average of color signals. The density calculation is viewed by the examiner as an averaging process. This is supported by Column 19, Lines 40-57 which shows that the density equation is the sum of density values for all pixels divided by the total number of pixels in the regions summed. This constitutes an average.

As for the argument pertaining to Ishikawa that Ishikawa does not teach the limitation that a flag indicating whether or not the digital image signal has been corrected after photography is recorded in the recording medium together with the digital image signal. Ishikawa further teaches on Column 41, Lines 40-52 that the measured density values which is viewed by the examiner as image data is stored with the flag data,

Drawings

The drawings filed on 1/6/1999 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. 37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawing submitted does not give details on the operation of the recording medium, characteristic value extracting means, image-processing means, and reproduction means. Please submit additional drawing which give the details of these components as they are described in the claims. The applicant claims that all limitations claimed are depicted in the drawings. However, The only Figure provided is Figure 1. It is clear that Figure 1 does not depict all the Limitations claimed by the applicant.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 recites the limitation "An image processing method as claimed in Claim 11" There is insufficient antecedent basis for this limitation in the claim. It is noted by the examiner that Claim 13 relies upon canceled Claims 1 and 11. For examination purposes this claim has been examined as if Claim 11 and 1 were not canceled.

Claim Rejections - 35 USC § 102

Art Unit: 2612

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1: Claims 10, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by

USPN 5,010,393 Saito.

2: In regards to Claim 10, Saito teaches on Column 1, Lines 53-68 the use of an image processing method of performing image processing on a digital signal from images taken from a digital camera. Saito teaches the use of extracting a characteristic value which is chroma information corresponding to the ratio of high-chroma colors from digital image signals obtained by photographing an object. Saito further teaches that this process provides a chroma adjusting method, therefore, carrying out image processing according to the chroma information from the digital signals. Saito depicts in Figure 1 that a digital image signal is composed of RGB color signals (Er, Eg, Eb). Saito teaches on Column 1, Lines 53-68 the use of extracting a characteristic value which is chroma information corresponding to the ratio of high-chroma colors from digital image signals obtained by photographing an object. Saito further teaches the method of converting the chroma of the digital image signal, based on the extracted chroma information.

3: As for Claim 19, Saito teaches on Column 1, Lines 53-68 the use of an image processing method of performing image processing on a digital signal from images taken from a digital camera. Saito teaches the use of extracting a characteristic value which is chroma information corresponding to the ratio of high-chroma colors from digital image signals obtained by photographing an object. Saito further teaches that this process

Art Unit: 2612

provides a chroma adjusting method, therefore, carrying out image processing according to the chroma information from the digital signals.

4: Claims 15, and 17, are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,568,194 Abe.

5: In regards to Claim 15, Abe teaches in the abstract an image processing method for carrying out white balance (image processing) on a digital image signal. Abe teaches the use of extracting the luminance signal from digital image signals from two images of subjects photographed by a digital camera. Abe further teaches the use of carrying out image processing according to the luminance value on the digital image signals to perform a white balance adjustment. Abe teaches in the abstract the use of extracting the luminance signal from digital image signals from two images of subjects photographed by a digital camera. Abe teaches on Column 3, Lines 25-44 that the luminance signal is extracted from an image wherein pixel data from an original image is divided into N blocks, each of which is composed of an 8X8 matrix of pixels. This block conversion circuit creates a thumbnail image. Therefore, the extraction of the characteristic value is extracted from a thumbnail image.

6: As for Claim 17, Abe teaches in the abstract the use of recording means or memory for recording the digital image signals to memory.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7: Claims 2-5, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 5,767,983 Terashita.

8: As for Claim 2, Terashita teaches on Column 4, Lines 12-33 an image processing method for carrying out image processing on a digital image signal. Terashita teaches the method of extracting film characteristic data from image signals from a plurality of image frames. Terashita further teaches the use of carrying out image processing according to the characteristic value on the digital image signals. Terashita teaches on Column 7, Lines 15-66 and on Column 10, Lines 26-39 that when each of the digital image signals is composed of RGB color signals, the characteristic data is a total average of averages of the digital image signals. Terashita further teaches the method of converting RGB color signals in a digital image signal representing an image of a gray subject to be equalized, based on the total average

9: In regards to Claim 3, Terashita teaches on Column 16, Lines 6-22 that when the digital image signals are composed of RGB color signals, photometric data for each color signal in each pixel in each of the digital image signals is calculated. Terashita teaches on Column 24, Lines 6-20 that weighting coefficients can be set respectively to characteristic data which is data from the photometric data.

Art Unit: 2612

10: In regards to Claim 4, Terashita teaches on Column 3, Lines 5-21 an image processing method wherein an average density is multiplied by a weighting factor.

Terashita teaches on Column 7, Lines 6-16 that the weight-factors can be set predetermined weighting coefficients.

11: As for Claim 5, Terashita teaches on Column 3, Lines 5-21 an image processing method wherein an average density is multiplied by a weighting factor. Terashita teaches on Column 7, Lines 6-16 that the weight-factors can be set predetermined weighting coefficients.

12: In regards to Claim 13, Terashita teaches on Column 4, Lines 12-33 an image processing method for carrying out image processing on a digital image signal. Terashita teaches the method of extracting film characteristic data from image signals from a plurality of image frames. Terashita further teaches the use of carrying out image processing according to the characteristic value on the digital image signals. Terashita teaches on Column 16, Lines 6-22 that when the digital image signals are composed of RGB color signals, photometric data for each color signal in each pixel in each of the digital image signals is calculated. Terashita teaches on Column 16, Lines 46-55 a that the characteristic value can be a value of the photometric data relative to the tricolor average of the signals. Terashita further teaches that a table value prepared from the sets of photometric data may be used. Terashita teaches on Column 40, Lines 30-37 that it is preferred the characteristic value is found based on the digital image signal from which high saturation pixels have been eliminated.

Claim Rejections - 35 USC § 103

Art Unit: 2612

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13: Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,568,194 Abe in view of USPN 5,682,573 Ishikawa et al.

14: As for Claim 18, Abe teaches the claimed invention as discussed in Claim 17, Abe does not teach the use of recording a flag indicating whether or not the digital image signal has been corrected after photographing in the recording medium together with the digital image signal. Abe further does not teach the method of extracting the characteristic value and performing image processing only on signals having the flag.

Ishikawa et al teaches on Column 20, Lines 35-51 a correcting operation wherein a flag indicating whether or not a digital image signal has been corrected after photographing in the recording medium together with the digital image signal. Ishikawa et al further teaches the method of extracting the characteristic value and performing image processing only on signals having the flag present.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the flag indicating method of Ishikawa et al to the signal processing method of Abe in order to allow the method of extracting the characteristic value and performing image processing only on signals having the flag present.

15: Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,464,173 Tretter.

16: As For Claim 20, Tretter teaches on Column 5, Lines 49-60 the use of an image processing method of carrying out image processing on digital image signals. Tretter teaches on Column 6, Lines 8-15 the use of extracting a property from an image such as luminescence from digital image signals and carrying out contrast enhancement according to the extracted data. It is further viewed by the examiner that the luminance of a image signal is equivalent to the brightness of an image signal

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

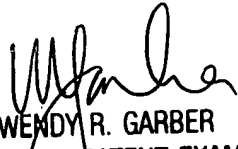
Art Unit: 2612

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-842-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is 703-308-6789.

James Hannett
Examiner
Art Unit 2612

JMH
August 6, 2003


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600